What is claimed is:

- 1. A sustained release solid dosage form comprising the following components:
 - a) a uniform admixture of:
 - (i) an active ingredient selected from the group consisting of valproic sodium acid, a pharmaceutically acceptable salt or ester of valproic acid, divalproex sodium, valpromide and a compound having the structure:

$$\bigcap_{N \text{ (CH}_2)n} \bigcap_{NR_2R_3}$$

or

$$\bigcap_{N \text{ } (CH_2)n} \bigcap_{NR_2R_3}$$

wherein R_1 , R_2 , and R_3 are independently the same or different and are hydrogen, a C_1 - C_6 alkyl group, an aralkyl group, or an aryl group, and n is an integer which is greater than or equal to 0 and less than or equal to 3; and

- (ii) a binder; and
- b) a hydroxypropylmethyl cellulose.

- The solid dosage form of claim 1, wherein the solid dosage form is a tablet.
- 3. The solid dosage form of claim 1 or 2, wherein the uniform admixture of component a) further comprises a filler.
- 4. The solid dosage form of claim 3, wherein the filler comprises a microcrystalline cellulose.
- 5. The solid dosage form of claim 1 or 2, wherein the hydroxypropylmethyl cellulose comprises 19%-24% by weight methoxyl substituent, 78-128 by weight hydroxyproproxyl substituent and has a particle size distribution such that at least hydroxypropylmethyl cellulose passes through a No. 40 US standard sieve, has an apparent viscosity of 78-117 millipascal-seconds (nominal value 98 mPa.s) by rotation and 80-120 cP (nominal value 100 cP) by Ubbelhode, at a concentration of 1% by weight in water at 20° C, and has a pH in the range 5.5-8.0.
- 6. The solid dosage form of claim 5, wherein at least 90% of the hydroxypropylmethyl cellulose passes through a No. 100 US standard sieve.
- 7. The solid dosage form of claim 1 or 2, further comprising as additional components a filler, a lubricant and a flow agent.
- 8. The solid dosage form of claim 1 or 2, wherein the binder of component a)(ii) comprises hydroxypropyl cellulose.

- 9. The solid dosage form of claim 1 or 2, further comprising a different hydroxypropylmethyl cellulose as a component.
- 10. The solid dosage form of claim 3, further comprising as additional components a filler, a lubricant and a flow agent.
- 11. The solid dosage form of claim 10, further comprising a different hydroxypropylmethyl cellulose as a component.
- The solid dosage form of claim 9 or 11, wherein the 12. different hydroxypropylmethyl cellulose comprises 19-24% by weight methoxyl substituent, 7-9% by weight hydroxypropoxyl substituent, has an apparent viscosity of 6,138-9,030 millipascal-seconds (nominal value 7382 mPa.s) by rotation and 11,250-21,000 cP (nominal value 15,000 cP) by Ubbelhode at a concentration of 1% by weight in water at 20°C, has a pH in the range 5.5-8.0 and has a particle size distribution such that at least 99% of the hydroxypropylmethyl cellulose passes through a No. 40 US standard sieve.
- 13. The solid dosage form of claim 12, wherein at least 90% of the hydroxypropylmethyl cellulose passes through a No. 100 US standard sieve.
- 14. The solid dosage form of claim 7, wherein
 the filler comprises a microcrystalline
 cellulose, anhydrous dicalcium phosphate, lactose,
 methylcellulose, carboxymethylcellulose, calcium
 carbonate, calcium sulfate kaolin, sodium chloride,

powdered cellulose, sucrose, mannitol or a combination of two or more of the foregoing;

the lubricant comprises magnesium stearate, sodium stearyl fumarate, hydrogenated castor oil, hydrogenated soybean oil, polyethylene glycol or a combination of two or more of the foregoing; and

the flow agent comprises a colloidal fumed silica, or colloidal silicon dioxide.

15. The solid dosage form of claim 14 wherein

the filler comprises a microcrystalline cellulose, anhydrous dicalcium phosphate, lactose or a combination of two or more of the foregoing;

the lubricant comprises magnesium stearate, sodium stearyl fumarate or a combination thereof; and

the flow agent comprises a colloidal fumed silica.

16. The solid dosage form of claim 1 or 2 wherein the active ingredient is a compound having the structure:

$$\bigcap_{N \in \mathbb{N}} \bigcap_{(CH_2)n} \bigcap_{NR_2R_3}$$

or

$$\bigcap_{N} \bigcap_{(CH_2)n} \bigcap_{NR_2R_3}$$

wherein R_1 , R_2 , and R_3 are independently the same or different and are hydrogen, a C_1 - C_6 alkyl group, an aralkyl group, or an aryl group, and n is an integer which is greater than or equal to 0 and less than or equal to 3.

- 17. The solid dosage form of claim 16, wherein the active ingredient is N-(2-Propylpentanoyl)glycinamide.
- 18. A sustained release solid dosage form comprising the following components:
 - a) a uniform admixture of:
 - (i) N-(2-Propylpentanoyl)glycinamide; and
 - (ii) a binder;
 - b) a hydroxypropylmethyl cellulose; and
 - c) a different hydroxypropylmethyl cellulose.
- 19. The solid dosage form of claim 18, wherein the solid dosage form is a tablet.
- 20. The solid dosage form of claim 18 or 19, comprising a filler, a lubricant and a flow agent as additional components and wherein the uniform admixture of component a) further comprises a filler.
- 21. The solid dosage form of claim 20, wherein

the binder of component a)(ii) comprises hydroxypropyl cellulose;

the filler of component a) comprises a microcrystalline cellulose;

the hydroxypropylmethyl cellulose of component b) has an apparent viscosity of 78-117 millipascalseconds (nominal value 98 mPa.s) by rotation and 80-120 cP (nominal value 100 cP) by Ubbelhode, at a concentration of 1% by weight in water at 20°C;

the hydroxypropylmethyl cellulose of component c) has an apparent viscosity of 6,138-9,030 millipascal-seconds (nominal value 7382 mPa.s) by rotation and 11,250-21,000 cP (nominal value 15,000 cP) by Ubbelhode at a concentration of 1% by weight in water at 20°C;

the filler component comprises a microcrystalline cellulose, anhydrous dicalcium phosphate, lactose or a combination of two or more of the foregoing;

the lubricant component comprises magnesium stearate, sodium stearyl fumarate or a combination thereof; and

the flow agent component comprises a colloidal fumed silica.

- 22. The solid dosage form of claim 21, comprising the following components:
 - a) a uniform admixture of:
 - (i) from 50 mg/solid dosage form to 1000 mg/solid dosage form of N-(2-propylpentanoyl) glycinamide,
 - (ii) from 1 mg/solid dosage form to 100
 mg/solid dosage form hydroxypropyl cellulose; and

- (iii)from 1 mg/solid dosage form to 200
 mg/solid dosage form microcrystalline cellulose;
- b) from 10 mg/solid dosage form to 300 mg/solid dosage form of hydroxypropylmethyl cellulose having 19%-24% by weight methoxyl substituent, 7%-12% by weight hydroxylproproxyl substituent and has a particle size distribution such that at least 99% of the hydroxypropylmethyl cellulose passes through a No. 40 US standard sieve;
- c) from 10 mg/solid dosage form to 300 mg/solid dosage form of a different hydroxypropylmethyl cellulose having 19%-24% by weight methoxyl substituent, 7%-12% hydroxylproproxyl substituent and has a particle size distribution such that at least 99% of the hydroxypropylmethyl cellulose passes through a No. 40 US standard sieve;
- d) from 1 mg/solid dosage form to 300 mg/solid dosage form microcrystalline cellulose, anhydrous dicalcium phosphate, lactose or a combination of two or more of the foregoing;
- e)from 0.1 mg/solid dosage form to 20 mg/solid dosage form of magnesium stearate, sodium stearyl fumarate or a combination thereof; and f) from 0.1 mg/solid dosage form to 15 mg/solid dosage form a colloidal fumed silica.
- 23. The solid dosage form of claim 21, comprising the following components:
 - a) a uniform admixture of:
 - (i) from 500 mg/solid dosage form to 850
 mg/solid dosage form of N-(2-propylpentanoyl)
 glycinamide,

- (ii) from 25 mg/solid dosage form to 75
 mg/solid dosage form hydroxypropyl
 cellulose; and
- (iii)from 50 mg/solid dosage form to 150
 mg/solid dosage form microcrystalline cellulose;
- b) from 100 mg/solid dosage form to 300 mg/solid dosage form of hydroxypropylmethyl cellulose having 19%-24% by weight methoxyl substituent, 7%-12% by weight hydroxylproproxyl substituent and has a particle size distribution such that at least 99% of the hydroxypropylmethyl cellulose passes through a No. 40 US standard sieve;
- c) from 20 mg/solid dosage form to 150 mg/solid dosage form of a different hydroxypropylmethyl cellulose having 19%-24% by weight methoxyl substituent, 7%-12% hydroxylproproxyl substituent and has a particle size distribution such that at least 99% of the hydroxypropylmethyl cellulose passes through a No. 40 US standard sieve;
- d) from 20 mg/solid dosage form to 100 mg/solid dosage form microcrystalline cellulose, anhydrous dicalcium phosphate, lactose or a combination of two or more of the foregoing;
- e) from 2 mg/solid dosage form to 20 mg/solid dosage form of magnesium stearate, sodium stearyl fumarate or a combination thereof; and
- f) from .5 mg/solid dosage form to 5 mg/solid dosage form a colloidal fumed silica, per 1 gram solid dosage form.
- 24. The solid dosage form of any one of claims 22 or 23, wherein at least 90% of the hydroxypropylmethyl cellulose of component b), of component c), or of

both component b) and c) passes through a No. 100 US standard sieve.

25. The solid dosage form of claim 23, wherein

the hydroxypropylmethyl cellulose of component b) has an apparent viscosity of 78-117 millipascalseconds (nominal value 98 mPa.s) by rotation and 80-120 cP (nominal value 100 cP) by Ubbelhode, at a concentration of 1% by weight in water at 20°C; and

the hydroxypropylmethyl cellulose of component c) has an apparent viscosity of 6,138-9,030 millipascal-seconds (nominal value 7382 mPa.s) by rotation and 11,250-21,000 cP (nominal value 15,000 cP) by Ubbelhode at a concentration of 1% by weight in water at 20°C.

- 26. The solid dosage form of claim 23, comprising the following components:
 - a) a uniform admixture of :
 - (i) 500 mg/solid dosage form N-(2-Propylpentanoyl)glycinamide,
 - (ii) 50 mg/solid dosage form hydroxypropyl
 cellulose; and
 - (iii) 100 mg/solid dosage form microcrystalline cellulose;
 - b) 150 mg/solid dosage form of hydroxypropylmethyl cellulose having 19%-24% by weight methoxyl substituent, 7%-12% by weight hydroxylproproxyl substituent and has a particle size distribution such that at least 99% of the hydroxypropylmethyl cellulose passes through a No. 40 US standard sieve;
 - c) 60 mg/solid dosage form of a different hydroxypropylmethyl cellulose having 19%-24% by

weight methoxyl substituent, 7%-12% hydroxylproproxyl substituent and has a particle size distribution such that at least 99% of the hydroxypropylmethyl cellulose passes through a No. 40 US standard sieve;

- d) 20 mg/solid dosage form lactose;
- e) 4.5 mg/solid dosage form magnesium stearate; and
- f) 1 mg/solid dosage form colloidal fumed silica.
- 27. The solid dosage form of claim 26, wherein at least 90% of the hydroxypropylmethyl cellulose of component b), of component c), or of both component b) and c) passes through a No. 100 US standard sieve.
- 28. The solid dosage form of claim 26, wherein the hydroxypropylmethyl cellulose of component b) has an apparent viscosity of 78-117 millipascalseconds (nominal value 98 mPa.s) by rotation and 80-120 cP (nominal value 100 cP) by Ubbelhode, at a concentration of 1% by weight in water at 20°C; and

the hydroxypropylmethyl cellulose of component c) has an apparent viscosity of 6,138-9,030 millipascal-seconds (nominal value 7382 mPa.s) by rotation and 11,250-21,000 cP (nominal value 15,000 cP) by Ubbelhode at a concentration of 1% by weight in water at 20°C.

- 29. A hard compressed tablet comprising a uniform admixture of the following components:
 - a) N-(2-Propylpentanoyl)glycinamide;
 - b) a hydroxypropylmethyl cellulose; and
 - c) a different hydroxypropylmethyl cellulose.

30. The tablet of claim 29, wherein

the hydroxypropylmethyl cellulose component b) has 19%-24% by weight methoxyl substituent, 7%-12% by weight hydroxylproproxyl substituent and has a particle size distribution such that at least 99% of the hydroxypropylmethyl cellulose passes through a No. 40 US standard sieve; and

the hydroxypropylmethyl cellulose component c) has 19%-24% by weight methoxyl substituent, 7%-12% by weight hydroxylproproxyl substituent and has a particle size distribution such that at least 99% of the hydroxypropylmethyl cellulose passes through a No. 40 US standard sieve.

31. The tablet of any one of claims 29 or 30, wherein at least 90% of the hydroxypropylmethyl cellulose of component b), of component c), or of both component b) and c) passes through a No. 100 US standard sieve.

32. The tablet of claim 30, wherein

the hydroxypropylmethyl cellulose component b) has an apparent viscosity of 78-117 millipascalseconds (nominal value 98 mPa.s) by rotation and 80-120 cP (nominal value 100 cP) by Ubbelhode, at a concentration of 1% by weight in water at 20°C; and

the hydroxypropylmethyl cellulose component c) has an apparent viscosity of 6.138-9.030 millipascal-seconds (nominal value 7382 mPa.s) by rotation and 11.250-21.000 cP (nominal value 15.000 cP) by Ubbelhode at a concentration of 1% by weight in water at 20° C.

- 33. The tablet of claim 29, further comprising a filler, lubricant and flow agent as additional components.
- 34. The tablet of claim 33, wherein

the filler comprises a microcrystalline cellulose, anhydrous dicalcium phosphate, lactose or a combination of two or more of the foregoing;

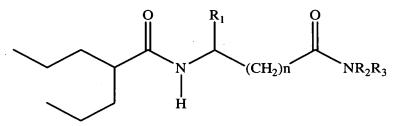
the lubricant comprises sodium stearyl fumarate; and

the flow agent comprises a colloidal fumed silica.

- 35. The tablet of claim 34, comprising a uniform admixture of the following components:
 - a) from 100 mg/tablet to 1000 mg/tablet N-(2-Propylpentanoyl)glycinamide;
 - b) from 10 mg/tablet to 300 mg/tablet of hydroxypropylmethyl cellulose with an apparent viscosity of 78-117 millipascal-seconds (nominal value 98 mPa.s) by rotation and 80-120 cP (nominal value 100 cP) by Ubbelhode, at a concentration of 1% by weight in water at 20°C;
 - c) from 10 mg/tablet to 300 mg/tablet of hydroxypropylmethyl cellulose with an apparent viscosity of 6,138-9,030 millipascal-seconds (nominal value 7382 mPa.s) by rotation and 11,250-21,000 cP (nominal value 15,000 cP) by Ubbelhode at a concentration of 1% by weight in water at 20°C;
 - d) from 1 mg/tablet to 300 mg/tablet a microcrystalline cellulose, anhydrous dicalcium phosphate, lactose or a combination of two or more of the foregoing;

- e) from 0.1 mg/tablet to 20 mg/tablet sodium stearyl fumarate; and
- f) from 0.1 mg/tablet to 15 mg/tablet a colloidal fumed silica.
- 36. The tablet of claim 34, comprising a uniform admixture of the following components:
 - a) from 400 mg/tablet to 1000 mg/tablet N-(2-Propylpentanoyl)glycinamide;
 - b) from 100 mg/tablet to 300 mg/tablet of hydroxypropylmethyl cellulose with an apparent viscosity of 78-117 millipascal-seconds (nominal value 98 mPa.s) by rotation and 80-120 cP (nominal value 100 cP) by Ubbelhode, at a concentration of 1% by weight in water at 20°C;
 - c) from 20 mg/tablet to 150 mg/tablet of hydroxypropylmethyl cellulose with an apparent viscosity of 6,138-9,030 millipascal-seconds (nominal value 7382 mPa.s) by rotation and 11,250-21,000 cP (nominal value 15,000 cP) by Ubbelhode at a concentration of 1% by weight in water at 20°C;
 - d) from 10 mg/tablet to 60 mg/tablet a microcrystalline cellulose, anhydrous dicalcium phosphate, lactose or a combination of two or more of the foregoing;
 - e) from 2 mg/tablet to 20 mg/tablet sodium stearyl fumarate; and
 - f) from 5 mg/tablet to 15 mg/tablet a colloidal fumed silica, per 1 gram tablet.
- 37. The tablet of claim 36, comprising a uniform admixture of the following components:

- a) 500 mg/tablet N-(2-Propylpentanoyl)glycinamide;
- b) 150 mg/tablet of hydroxypropylmethyl cellulose with an apparent viscosity of 78-117 millipascalseconds (nominal value 98 mPa.s) by rotation and 80-120 cP (nominal value 100 cP) by Ubbelhode, at a concentration of 1% by weight in water at 20°C;
- c) 60 mg/tablet of hydroxypropylmethyl cellulose with an apparent viscosity of 6,138-9,030 millipascalseconds (nominal value 7382 mPa.s) by rotation and 11,250-21,000 cP (nominal value 15,000 cP) by Ubbelhode at a concentration of 1% by weight in water at 20°C;
- d) 20 mg/tablet lactose;
- e) 10 mg/tablet sodium stearyl fumarate; and
- f) 10 mg/tablet colloidal fumed silica.
- 38. A composition in granulate form comprising a uniform admixture of:
 - (i) an active ingredient selected from the group consisting of valproic sodium acid, a pharmaceutically acceptable salt or ester of valproic acid, divalproex sodium, valpromide and a compound having the structure:



$$\bigcap_{N} \bigcap_{\text{CH}_2)n} \bigcap_{NR_2R_3}$$

wherein R_1 , R_2 , and R_3 are independently the same or different and are hydrogen, a C_1 - C_6 alkyl group, an aralkyl group, or an aryl group, and n is an integer which is greater than or equal to 0 and less than or equal to 3; and

- (ii) a hydroxypropyl cellulose.
- 39. The composition of claim 38, wherein the active ingredient comprises a compound having the structure:

$$\bigcap_{N} \bigcap_{(CH_2)n} \bigcap_{NR_2R_3}$$

or

$$\bigcap_{N \in CH_2 \setminus n} \bigcap_{N \in R_2 \setminus R_3} \bigcap_{N \in R_3 \setminus R_3} \bigcap_{N \in R_3 \setminus R_3 \setminus R_3} \bigcap_{N \in R_3 \setminus R_3 \setminus R_3 \setminus R_3} \bigcap_{N \in R_3 \setminus R_3$$

wherein R_1 , R_2 , and R_3 are independently the same or different and are hydrogen, a $C_1\text{--}C_6$ alkyl group, an

aralkyl group, or an aryl group, and n is an integer which is greater than or equal to 0 and less than or equal to 3.

- 40. The composition of claim 38, wherein the active ingredient comprises valproic sodium acid, a pharmaceutically acceptable salt or ester of valproic acid, divalproex sodium or valpromide.
- 41. A tablet comprising the granulate of claim 38 as a component.
- 42. The tablet of claim 41, wherein the granulate further comprises a filler.
- 43. The tablet of claim 41, further comprising a hydroxypropylmethyl cellulose as a component.
- 44. The tablet of claim 41, further comprising as additional components a filler, a lubricant and a flow agent.
- 45. The tablet of claim 43, further comprising as additional components a filler, a lubricant and a flow agent.
- 46. The tablet of claim 43, further comprising a different hydroxypropylmethyl cellulose as a component.
- 47. The tablet of claim 43, wherein
 the hydroxypropylmethyl cellulose has 19%-24%
 by weight methoxyl substituent, 7%-12% by weight

hydroxylproproxyl substituent and has a particle

size distribution such that at least 99% of the hydroxypropylmethyl cellulose passes through a No. 40 US standard sieve.

48. The tablet of claim 47, wherein at least 90% of the hydroxypropylmethyl cellulose passes through a No. 100 US standard sieve.

49. The tablet of claim 47, wherein

the hydroxypropylmethyl cellulose has an apparent viscosity of 78-117 millipascal-seconds (nominal value 98 mPa.s) by rotation and 80-120 cP (nominal value 100 cP) by Ubbelhode, at a concentration of 1% by weight in water at 20°C.

50. The tablet of claim 46, wherein

the different hydroxypropylmethyl cellulose has 19%-24% by weight methoxyl substituent, 7%-12% by weight hydroxylproproxyl substituent and has a particle size distribution such that at least 99% of the hydroxypropylmethyl cellulose passes through a No. 40 US standard sieve.

51. The tablet of claim 50, wherein at least 90% of the hydroxypropylmethyl cellulose passes through a No. 100 US standard sieve.

52. The tablet of claim 50, wherein

the different hydroxypropylmethyl cellulose has an apparent viscosity of 6,138-9,030 millipascalseconds (nominal value 7382 mPa.s) by rotation and 11,250-21,000 cP (nominal value 15,000 cP) by Ubbelhode at a concentration of 1% by weight in water at 20°C .

- 53. The tablet of claim 42, wherein the filler in the granulate is a microcrystalline cellulose.
- 54. The tablet of claim 45, wherein

the filler comprises a microcrystalline cellulose, anhydrous dicalcium phosphate,

lactose or a combination of two or more of the foregoing;

the lubricant comprises magnesium stearate, sodium stearyl fumarate or a combination thereof; and

the flow agent comprises a colloidal fumed silica.

55. A sustained release tablet comprising a compound having the structure:

$$\bigcap_{H} \bigcap_{(CH_2)n} \bigcap_{NR_2R_3}$$

or

$$\bigcap_{N \in CH_2 \cap n} \bigcap_{N \in R_2 R_3}$$

wherein R_1 , R_2 , and R_3 are independently the same or different and are hydrogen, a C_1 - C_6 alkyl group, an aralkyl group, or an aryl group, and n is an integer

- which is greater than or equal to 0 and less than or equal to 3.
- 56. The sustained release tablet of claim 55, wherein the compound is N-(2-propylpentanoyl)glycinamide.
- 57. A method of treating neuropathic pain in a subject in need of such treatment comprising administering to the subject a therapeutically effective dose of the solid dosage form of any one of claims 1-28 or the tablet of any one of claims 29-37 or 41-56 in order to thereby treat the neuropathic pain in the subject.
- 58. A method of treating a headache disorder in a subject in need of such treatment comprising administering to the subject a therapeutically effective dose of the solid dosage form of any one of claims 1-28 or the tablet of any one of claims 29-37 or 41-56 in order to thereby treat the headache disorder in the subject.
- 59. A method of treating epilepsy in a subject in need of such treatment comprising administering to the subject a therapeutically effective dose of the solid dosage form of any one of claims 1-28 or the tablet of any one of claims 29-37 or 41-56 in order to thereby treat epilepsy in the subject.
- 60. A method of controlling seizures in a subject suffering from epilepsy comprising administering to the subject a therapeutically effective dose of the solid dosage form of any one of claims 1-28 or the

tablet of any one of claims 29-37 or 41-56 in order to thereby control the seizures in the subject.

- 61. A method of treating pain in a subject in need of such treatment comprising administering to the subject a therapeutically effective dose of the solid dosage form of any one of claims 1-28 or the tablet of any one of claims 29-37 or 41-56 in order to thereby treat pain in the subject.
- 62. A method of pain prophylaxis in a subject in need of such treatment comprising administering to the subject a prophylactic dose of the solid dosage form of any one of claims 1-28 or the tablet of any one of claims 29-37 or 41-56 in order to thereby effect pain prophylaxis in the subject.
- A method of treating mania in bipolar disorder in a 63. subject in need of such treatment comprising administering to the subject a therapeutically effective dose of the solid dosage form of any one of claims 1-28 or the tablet of any one of claims 29-37 or 41-56 in order to thereby treat mania in bipolar disorder in the subject.
- 54. A method of attenuating bipolar mood swings in a subject suffering from bipolar disorder comprising administering to the subject a therapeutically effective dose of the solid dosage form of any one of claims 1-28 or the tablet of any one of claims 29-37 or 41-56 in order to thereby attenuate the bipolar mood swings in the subject.

- 65. A process for preparing the solid dosage form of claim 1 or 2, comprising the steps of:
 - a) admixing predetermined amounts of
 - (i) an active ingredient selected from the group consisting of valproic sodium acid, a pharmaceutically acceptable salt or ester of valproic acid, divalproex sodium, valpromide and a compound having the structure:

$$\begin{array}{c|c}
O & R_1 & O \\
N & (CH_2)n & NR_2R_3
\end{array}$$

or

$$\bigcap_{N} \bigcap_{\text{CH}_2)n} \bigcap_{NR_2R_3}$$

wherein R_1 , R_2 , and R_3 are independently the same or different and are hydrogen, a C_1 - C_6 alkyl group, an aralkyl group, or an aryl group, and n is an integer which is greater than or equal to 0 and less than or equal to 3; and

(ii) a binder;

- b) admixing the uniform mixture of step a) with a predetermined amount of a hydroxypropylmethyl cellulose; and
- c) compressing the mixture of step b) to form the tablet.

- 66. The process of claim 65, wherein step b) further comprises admixing the uniform mixture with a predetermined amount of a different hydroxypropylmethyl cellulose.
- 67. The process of claim 66, wherein step b) further comprises admixing the uniform mixture with predetermined amounts of a filler, a lubricant and a flow agent.
- 68. The process of claim 67, wherein the flow agent comprises colloidal fumed silica.
- 69. The process of claim 67, wherein the filler comprises microcrystalline cellulose, anhydrous dicalcium phosphate, lactose or a combination of two or more of the foregoing.
- 70. The process of claim 69, wherein the filler comprises lactose.
- 71. The process of claim 67, wherein the lubricant comprises magnesium stearate or sodium stearyl fumarate or a combination thereof.
 - 72. The process of claim 71, wherein the lubricant comprises magnesium stearate.
 - 73. The process of claim 66, wherein
 each hydroxypropylmethyl cellulose of step b)
 has 19%-24% by weight methoxyl substituent, 7%-12%

by weight hydroxylproproxyl substituent and has a particle size distribution such that at least 99% of

the hydroxypropylmethyl cellulose passes through a No. 40 US standard sieve.

- 74. The process of claim 73, wherein at least 90% of the hydroxypropylmethyl cellulose passes through a No. 100 US standard sieve.
- 75. The process of claim 73, wherein

the first hydroxypropylmethyl cellulose has an apparent viscosity of 78-117 millipascal-seconds (nominal value 98 mPa.s) by rotation and 80-120 cP (nominal value 100 cP) by Ubbelhode, at a concentration of 1% by weight in water at 20°C; and

the second hydroxypropylmethyl cellulose has an apparent viscosity of 6,138-9,030 millipascalseconds (nominal value 7382 mPa.s) by rotation and 11,250-21,000 cP (nominal value 15,000 cP) by Ubbelhode at a concentration of 1% by weight in water at 20°C .

- 76. A process for preparing the hard compressed tablet of claim 29 comprising the steps of:
 - a) admixing predetermined amounts of N-(2-Propylpentanoyl)glycinamide, hydroxypropylmethyl cellulose, and a different hydroxypropylmethyl cellulose; and
 - b) compressing the mixture of step a) to form the hard compressed tablet.
- 77. The process of claim 76, wherein

each hydroxypropylmethyl cellulose of step a) has 19%-24% by weight methoxyl substituent, 7%-12% by weight hydroxylproproxyl substituent and has a particle size distribution such that at least 99% of

the hydroxypropylmethyl cellulose passes through a No. 40 US standard sieve.

- 78. The process of claim 77, wherein at least 90% of the hydroxypropylmethyl cellulose passes through a No. 100 US standard sieve.
- 79. The process of claim 77, wherein

the hydroxypropylmethyl cellulose has an apparent viscosity of 78-117 millipascal-seconds (nominal value 98 mPa.s) by rotation and 80-120 cP (nominal value 100 cP) by Ubbelhode, at a concentration of 1% by weight in water at 20°C; and

the different hydroxypropylmethyl cellulose has an apparent viscosity of 6.138-9.030 millipascalseconds (nominal value 7382 mPa.s) by rotation and 11.250-21.000 cP (nominal value 15.000 cP) by Ubbelhode at a concentration of 1% by weight in water at 20°C .

- 80. The process of claim 76, wherein step a) further comprises admixing predetermined amounts of a filler, lubricant and flow agent as additional components.
- 81. The process of claim 80, wherein

the filler comprises microcrystalline cellulose, anhydrous dicalcium phosphate, lactose or a combination of two or more of the foregoing;

the lubricant comprises sodium stearyl fumarate; and

the flow agent comprises colloidal fumed silica.

82. A process for preparing the composition in granulate form of claim 38, comprising granulating predetermined amount of valproic sodium acid, pharmaceutically acceptable salt or ester valproic acid, divalproex sodium, valpromide or a compound having the structure:

$$\begin{array}{c|c}
O & R_1 & O \\
N & (CH_2)n & NR_2R_3
\end{array}$$

or

$$\bigcap_{N} \bigcap_{(CH_2)n} \bigcap_{NR_2R_3}$$

wherein R_1 , R_2 , and R_3 are independently the same or different and are hydrogen, a C_1 - C_6 alkyl group, an aralkyl group, or an aryl group, and n is an integer which is greater than or equal to 0 and less than or equal to 3, and a predetermined amount of hydroxypropyl cellulose to form the composition in granulate form.

- 83. A process for preparing a sustained release tablet comprising the steps of:
 - a) admixing the granules of claim 38 with predetermined amounts of a hydroxypropylmethyl cellulose; and

- b) compressing the mixture of step a) to form the tablet.
- 84. The process of claim 83, wherein step a) further comprises admixing the granules with predetermined amount of each of different hydroxypropylmethyl cellulose, a filler, lubricant and a flow agent.
- 85. The process of claim 84, wherein the flow agent comprises colloidal fumed silica.
- 86. The process of claim 84, wherein the filler comprises microcrystalline cellulose, anhydrous dicalcium phosphate, lactose or a combination of two or more of the foregoing.
- 87. The process of claim 86, wherein the filler is lactose.
- 88. The process of claim 84, wherein the lubricant comprises magnesium stearate or sodium stearyl fumarate or a combination thereof.
- 89. The process of claim 88, wherein the lubricant comprises magnesium stearate.
- 90. The process of claim 83, comprising the steps of:

 a) admixing the granules with predetermined amounts of hydroxypropyl methyl cellulose having an apparent viscosity of 6,138-9,030 millipascal-seconds (nominal value 7382 mPa.s) by rotation and 11,250-21,000 cP (nominal value 15,000 cP) by Ubbelhode at a concentration of 1% by weight in water at 20°C, and

hydroxypropyl methyl cellulose having an apparent viscosity of 78-117 millipascal-seconds (nominal value 98 mPa.s) by rotation and 80-120 cP (nominal value 100 cP) by Ubbelhode, at a concentration of 1% by weight in water at 20°C; and

- b) compressing the mixture of step a) to form the tablet.
- 91. The process of claim 90, wherein step a) further comprises admixing the granules with predetermined amounts of a flow agent, a filler, and a lubricant.
- 92. The process of claim 91 comprising the steps of

 a) admixing the granules with
 - a predetermined amount of hydroxypropylmethyl cellulose with an apparent viscosity of 78-117 millipascal-seconds (nominal value 98 mPa.s) by rotation and 80-120 cP (nominal value 100 cP) by Ubbelhode, at a concentration of 1% by weight in water at 20°C which results in tablets containing 150 mg/tablet;
 - a predetermined amount of hydroxypropyl methyl cellulose with an apparent viscosity of 6,138-9,030 millipascal-seconds (nominal value 7382 mPa.s) by rotation and 11,250-21,000 cP (nominal value 15,000 cP) by Ubbelhode at a concentration of 1% by weight in water at 20°Cwhich results in tablets containing 60 mg/tablet;
 - a predetermined amount of lactose
 which results in tablets containing 20 mg/tablet;
 - a predetermined amount of magnesium stearate which results in tablets containing 4.5 mg/tablet; and

a predetermined amount of a colloidal fumed silica which results in tablets containing 1 mg/tablet; and

- b) compressing the mixture of step a) to form the tablet.
- 93. Use of an active ingredient selected from the group consisting of valproic sodium acid, a pharmaceutically acceptable salt or ester of valproic acid, divalproex sodium, valpromide and a compound having the structure:

$$\bigcap_{N \in \mathbb{N}} \bigcap_{(CH_2)n} \bigcap_{NR_2R_3}$$

or

$$\bigcap_{N \in \mathbb{C}(CH_2)} \bigcap_{N \in \mathbb{R}_2 \setminus \mathbb{R}_3} \bigcap_{N \in \mathbb{R}_2} \bigcap_{N \in \mathbb{R}_2 \setminus \mathbb{R}_3} \bigcap_{N \in \mathbb{R}_2} \bigcap_{N \in \mathbb{$$

wherein R_1 , R_2 , and R_3 are independently the same or different and are hydrogen, a C_1 - C_6 alkyl group, an aralkyl group, or an aryl group, and n is an integer which is greater than or equal to 0 and less than or equal to 3, for manufacturing a sustained release solid dosage form of any one of claims 1-28 or tablet of any one of claims 29-37 or 41-56 for use in treating a headache disorder in a subject.

94. Use of an active ingredient selected from the group consisting of valproic sodium acid, a pharmaceutically acceptable salt or ester of valproic acid, divalproex sodium, valpromide and a compound having the structure:

$$\bigcap_{N} \bigcap_{\text{CH}_2)n} \bigcap_{NR_2R_3}$$

or

$$N$$
 $(CH_2)n$
 NR_2R_3

wherein R_1 , R_2 , and R_3 are independently the same or different and are hydrogen, a C_1 - C_6 alkyl group, an aralkyl group, or an aryl group, and n is an integer which is greater than or equal to 0 and less than or equal to 3, for manufacturing sustained release solid dosage form of any one of claims 1-28 or tablet of any one of claims 29-37 or 41-56 for use in treating neuropathic pain in a subject.

95. Use of an active ingredient selected from the group consisting of valproic sodium acid, a pharmaceutically acceptable salt or ester of valproic acid, divalproex sodium, valpromide and a compound having the structure:

$$\bigcap_{N \in \mathbb{N}} \bigcap_{N \in \mathbb{N}} \bigcap_{$$

or

$$\bigcap_{N} \bigcap_{\text{CH}_2)n} \bigcap_{NR_2R_3}$$

wherein R_1 , R_2 , and R_3 are independently the same or different and are hydrogen, a C_1 - C_6 alkyl group, an aralkyl group, or an aryl group, and n is an integer which is greater than or equal to 0 and less than or equal to 3, for manufacturing a sustained release solid dosage form of any one of claims 1-28 or tablet of any one of claims 29-37 or 41-56 for use in treating epilepsy in a subject.

96. Use of an active ingredient selected from the group consisting of valproic sodium acid, a pharmaceutically acceptable salt or ester of valproic acid, divalproex sodium, valpromide and a compound having the structure:

$$\bigcap_{N \in \mathbb{C}(CH_2)} \bigcap_{N \in \mathbb{R}_2 \setminus \mathbb{R}_3} \bigcap_{N \in \mathbb{R}_2} \bigcap_{N \in \mathbb{$$

$$\bigcap_{N \in \mathbb{N}} \bigcap_{(CH_2)n} \bigcap_{NR_2R_3}$$

wherein R_1 , R_2 , and R_3 are independently the same or different and are hydrogen, a C_1 - C_6 alkyl group, an aralkyl group, or an aryl group, and n is an integer which is greater than or equal to 0 and less than or equal to 3, for manufacturing a sustained release solid dosage form of any one of claims 1-28 or tablet of any one of claims 29-37 or 41-56 for use in controlling seizures in a subject suffering from epilepsy.

97. Use of an active ingredient selected from the group consisting of valproic sodium acid, a pharmaceutically acceptable salt or ester of valproic acid, divalproex sodium, valpromide and a compound having the structure:

$$N$$
 $(CH_2)n$
 NR_2R_3

$$\bigcap_{H}^{O}\bigcap_{(CH_2)n}^{R_1}\bigcap_{NR_2R_3}^{O}$$

wherein R_1 , R_2 , and R_3 are independently the same or different and are hydrogen, a C_1 - C_6 alkyl group, an aralkyl group, or an aryl group, and n is an integer which is greater than or equal to 0 and less than or equal to 3, for manufacturing a sustained release solid dosage form of any one of claims 1-28 or tablet of any one of claims 29-37 or 41-56 for use in treating mania in bipolar disorder in a subject.

98. Use of an active ingredient selected from the group consisting of valproic sodium acid, a pharmaceutically acceptable salt or ester of valproic acid, divalproex sodium, valpromide and a compound having the structure:

$$\bigcap_{N} \bigcap_{\text{CCH}_2)n} \bigcap_{NR_2R_3}$$

or

$$\bigcap_{N \in \mathbb{C}(CH_2)} \bigcap_{N \in \mathbb{R}_2 \setminus \mathbb{R}_3} \bigcap_{N \in \mathbb{R}_2 \setminus \mathbb{R}_2} \bigcap_{N \in \mathbb{R}_2 \setminus \mathbb{R}_2} \bigcap_{N \in \mathbb{R}_2} \bigcap_{$$

wherein R_1 , R_2 , and R_3 are independently the same or different and are hydrogen, a C_1 - C_6 alkyl group, an aralkyl group, or an aryl group, and n is an integer which is greater than or equal to 0 and less than or equal to 3, for manufacturing a sustained release solid dosage form of any one of claims 1-28 or tablet of any one of claims 29-37 or 41-56 for use in attenuating bipolar mood swings in a subject suffering from bipolar mood disorder.

99. Use of an active ingredient selected from the group consisting of valproic sodium acid, a pharmaceutically acceptable salt or ester of valproic acid, divalproex sodium, valpromide and a compound having the structure:

$$\bigcap_{H} \bigcap_{(CH_2)n} \bigcap_{NR_2R_3}$$

or

$$\bigcap_{N} \bigcap_{\text{CH}_2)\text{n}} \bigcap_{NR_2R_3}$$

wherein R_1 , R_2 , and R_3 are independently the same or different and are hydrogen, a C_1 - C_6 alkyl group, an aralkyl group, or an aryl group, and n is an integer which is greater than or equal to 0 and less than or

equal to 3, for manufacturing a sustained release solid dosage form of any one of claims 1-28 or tablet of any one of claims 29-37 or 41-56 for use in treating pain in a subject.

100. Use of an active ingredient selected from the group consisting of valproic sodium acid, a pharmaceutically acceptable salt or ester of valproic acid, divalproex sodium, valpromide and a compound having the structure:

$$\bigcap_{N} \bigcap_{\text{CH}_2)n} \bigcap_{NR_2R_3}$$

or

$$\bigcap_{N} \bigcap_{\text{CH}_2)n} \bigcap_{NR_2R_3}$$

wherein R_1 , R_2 , and R_3 are independently the same or different and are hydrogen, a C_1 - C_6 alkyl group, an aralkyl group, or an aryl group, and n is an integer which is greater than or equal to 0 and less than or equal to 3, for manufacturing a sustained release solid dosage form of any one of claims 1-28 or tablet of any one of claims 29-37 or 41-56 for use in effecting pain prophylaxis in a subject.

- 101. The sustained release solid dosage form of any one of claims 1-28 or tablet of any one of claims 29-37 or 41-56 for use in treating a headache disorder in a subject.
- 102. The sustained release solid dosage form of any one of claims 1-28 or tablet of any one of claims 29-37 or 41-56 for use in treating neuropathic pain in a subject.
- 103. The sustained release solid dosage form of any one of claims 1-28 or tablet of any one of claims 29-37 or 41-56 for use in treating epilepsy in a subject.
- 104. The sustained release solid dosage form of any one of claims 1-28 or tablet of any one of claims 29-37 or 41-56 for use in controlling seizures in a subject suffering from epilepsy.
- 105. The sustained release solid dosage form of any one of claims 1-28 or tablet of any one of claims 29-37 or 41-56 for use in treating mania in bipolar disorder in a subject.
- 105. The sustained release solid dosage form of any one of claims 1-28 or tablet of any one of claims 29-37 or 41-56 for use in attenuating bipolar mood swings in a subject suffering from bipolar disorder.
- 106. The sustained release solid dosage form of any one of claims 1-28 or tablet of any one of claims 29-37 or 41-56 for use in treating pain in a subject.

- 107. The sustained release solid dosage form of any one of claims 1-28 or tablet of any one of claims 29-37 or 41-56 for use in effecting pain prophylaxis in a subject.
- 108. A controlled release oral unit dose composition comprising N-(2-propylpentanoyl) glycinamide and at least one pharmaceutically acceptable carrier, wherein the composition when orally ingested by a human subject, induces a peak blood plasma level of N-(2-propylpentanoyl) glycinamide between 4 and 24 hours after ingestion of a single oral unit dose.
- 109. The controlled release oral unit dose composition of claim 108, wherein the composition when orally ingested by a human subject, induces a peak blood plasma level of N-(2-propylpentanoyl) glycinamide between 4 and 12 hours after ingestion of a single oral unit dose.
- 110. The controlled release oral unit dose composition of claim 109, wherein the composition when orally ingested by a human subject, induces a peak blood plasma level of N-(2-propylpentanoyl) glycinamide between 6 and 12 hours after ingestion of a single oral unit dose.
- 111. The controlled release oral unit dose composition of claim 110, wherein the composition when orally ingested by a human subject, induces a peak blood plasma level of N-(2-propylpentanoy1) glycinamide between 6 and 8 hours after ingestion of a single oral unit dose.

- 112. The controlled release oral dose composition of any one of claims 108 to 111, wherein the peak blood plasma level of N-(2-propylpentanoyl) glycinamide is from 0.5 micrograms/ml to 16 micrograms/ml per a 1000 mg dose of N-(2-propylpentanoyl) glycinamide in the composition.
- 113. The controlled release oral dose composition of claim 108, wherein the composition when orally ingested by a human subject, induces a peak blood plasma level of N-(2-propylpentanoyl) glycine in the human subject from 0.5 µg/mL to 1.7 µg/mL per a 1000 mg dose of N-(2-propylpentanoyl) glycinamide in the composition.
- 114. A controlled release oral dose composition comprising N-(2-propylpentanoyl) glycinamide and a pharmaceutically acceptable carrier, wherein the composition when orally ingested by a human subject, induces а peak blood plasma level of propylpentanoyl) glycinamide of $0.5 \, \mu g/mL$ µg/mL per a 1000 mg dose in the composition.
- 115. A controlled release oral dose composition comprising N-(2-propylpentanoyl) glycinamide and a pharmaceutically acceptable carrier, wherein the composition when orally ingested by a human subject, peak blood plasma level of induces propylpentanoyl) glycine of 0.5 µg/mL to 1.7 µg/mL 1000 of N-(2-propylpentanoyl) per mg dose glycinamide in the composition.
- 116. A method of inducing in a human subject a peak blood plasma level of N-(2-propylpentanoyl) glycinamide

between 4 and 24 hours after administration of N-(2propylpentanoyl) glycinamide, comprising administering to the human subject a controlled release oral unit dose composition comprising N-(2propylpentanoyl) glycinamide and at least one pharmaceutically carrier, which acceptable composition induces a peak blood plasma level of N-(2-propylpentanoyl) glycinamide between 4 and 24 hours after administration of a single oral unit dose.

- 117. The method of claim 116, wherein the peak blood plasma level of N-(2-propylpentanoyl) glycinamide occurs between 4 and 12 hours after administration.
- 118. The method of claim 116, wherein the peak blood plasma level of N-(2-propylpentanoyl) glycinamide is 0.5 μ g/mL to 16 μ g/mL per 1000 mg dose of N-(2-propylpentanoyl) glycinamide in the composition.
- 119. The method of any one of claims 116-118, wherein the administration to the human subject of a controlled release oral unit dose composition comprising N-(2-propylpentanoyl) glycinamide and at least one pharmaceutically acceptable carrier induces a peak blood plasma level of N-(2-propylpentanoyl) glycine in the human subject from 0.5 µg/mL to 1.7 µg/mL upon administration of a single 1000 mg dose of N-(2-propylpentanoyl) glycinamide.
- 120. The method of any one of claims 116-119, wherein the controlled release oral dose composition is the solid dosage form of any one of claims 18-28 or the tablet of any one of claims 29-37 or 41-56.